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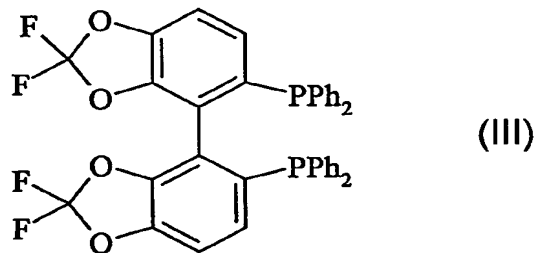
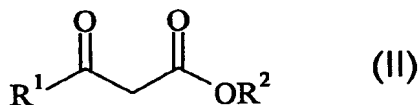
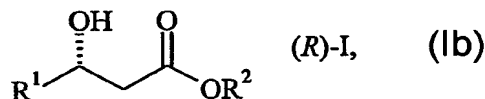
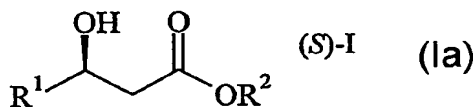
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(54) Title: PROCESS FOR THE PREPARATION OF (S)- OR (R)-4-HALO-3-HYDROXYBUTYRATES



(57) Abstract: Process for the preparation of enantiomerically pure (S)- or (R)-4-halo-3-hydroxybutyrates of formula (I), wherein R<sup>1</sup> is CH<sub>2</sub>X, CHX<sub>2</sub> or CX<sub>3</sub> and X independently represents Cl and/or Br and wherein R<sup>2</sup> is C<sub>1-6</sub>-alkyl, C<sub>3-8</sub>-cycloalkyl, aryl or aralkyl, each aryl or aralkyl being optionally further substituted with one or more C<sub>1-4</sub>-alkyl groups and/or halogen atoms, by asymmetric hydrogenation of 4-halo-3-oxobutyric acid esters of formula (II), wherein R<sup>1</sup>, R<sup>2</sup> and X are as defined above in the presence of a catalyst of a ruthenium complex comprising a chiral ligand of the formula (III).